

IN OCTOBER 1969 we received a communication from John Britten. He was designing a glassfibre body for the Sprite/Midget — was there a glimmer of interest in the Triple C caves? Yes man, there certainly was and still is, for we have followed the evolution of the Arkley, even from its birth as a plaster mock-up.

We saw the body taking shape and contributed in our own small way on points of detail — such as standing in the back of the car to show John what the car would look like with the intended lowered springs — right up until the Specialist Sports Car Show thing at the beginning of this year.

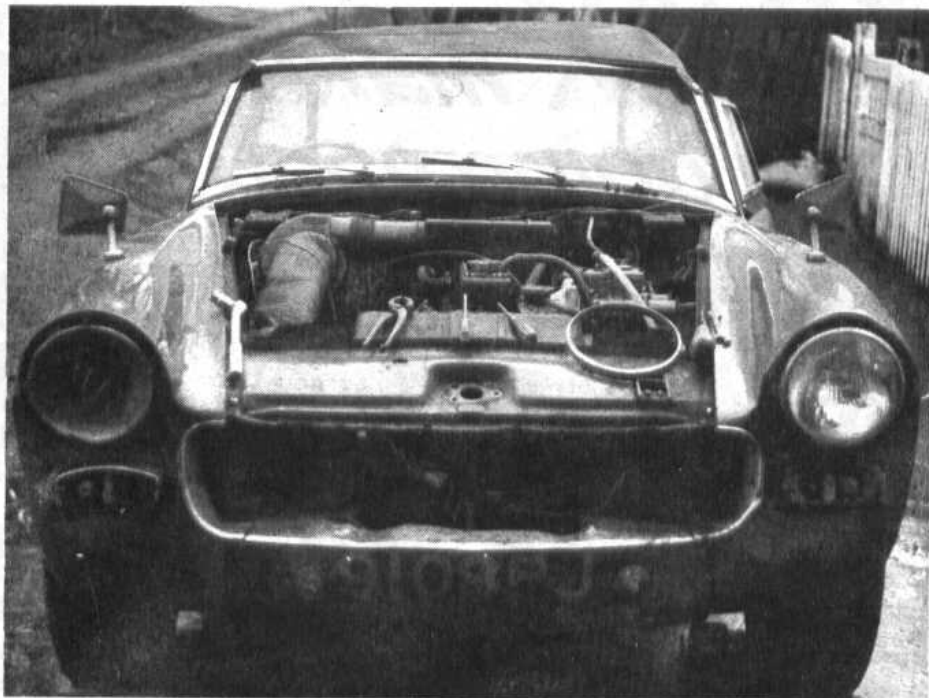
Elbow grease has now been well rewarded and the finished bodywork is of a very high standard, both in the quality of the glassfibre and in the body style itself, and heaven only knows how many times John would rush off with an envelope covered in sketches of wings, doors, radiator grilles and other teasers for the styling experts to translate into three dimensional form.

Right from the first whisper of Arkley we had intended to build one. And every time we went down to Arkley we eagerly looked around for spare body parts to pick up — but the project was not to start for long after the January show. In fact Arkley Engineering started to sell body kits in March, in theory, but production was slow to start and after the rush to get the mustard coloured car to the show everybody concerned was knocked out. However that rush was justified as the car received wide coverage in the motoring press.

When at last the call to build arrived there was no car on which to base the vehicle. Finances being at typical low level we were looking for a running but crunched car, damaged bodywork being required because we didn't need it!

So poor were we at that time that a really early car seemed on the cards — a Mk. I or early Mk. II Sprite. The reason for this choice was cost. A rolled or mildly dented early Sprite should set you back £50-£60. However, the disadvantages if one intends to build a fire-breather are legion. For a start, or stop rather, one has to put up with the original drum brakes. For the go you have a delightfully ungroovy 948cc engine. Very tuneable, but perhaps we can auction the chauffeur or something. Third disadvantage of going cheap at the start is rust, and although the masochistic wire brush wielders may disagree, this is the biggest nuisance of all.

So a more expensive and later base car was sought. We rang up one well known breaker who said he had a nice Sprite with rear damage only. Yahoo



ANCIENT SPRITE TO ARKLEY



we thought, until we got down there to find the car was a Spitfire!

We set our sights at the £100 mark and were looking for at least a 1098cc engine. John Britten rang up a few days later and offered a 1963 Midget Mk. I with frontal damage. Yahoo once again thought we and this time we were right. The price of this car was £160, which was a bit high. On closer inspection the car was found to be in good condition with virtually no rust, the engine ran and had, we were told,

been overhauled recently, and the running gear was fit for the road. In fact its only fault was a 'soft' dent in the front region, which rendered it perfect for us.

Before buying a damaged car, especially with frontal crumpling, it is important to have it up on a ramp for a quick shifty underneath. Check for kinking at the wishbone mounting points and also for any splitting at corners which may indicate that the

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chassis is bent (as may be dealer) or that the wishbone has changed its mounting location through hard wheel contact with kerbs. In any case — do not buy. It is possible to have the chassis measured to factory spec, but this may alarm you more than need be, and the chassis may be perfectly useable.

One solution we thought of during our frantic search of the breakers' yards was to use one of the plentiful rear ends lying around in the breakers' yards, the result of very enthusiastic brick wall ramming. No-one, it seems, crunches the Spridget gently. Most unfair we thought. So if you are very brave and would not mind starting from a stripped bodyshell/chassis unit, buy one of these rear ends, first making sure it is fine from the front bulkhead back, and have two new chassis legs welded in place.

This terrifying operation does work and we believe that the Britten Midget has been so dealt with on one occasion. Cost should be about £25 and the wreck without engine may cost £15. Fine for the courageous, but we needed transport. So a running car it had to be.

We ran the Midget around in normal form for a while to sort out any bugs and were alarmed to contemplate oil blackened passengers after each trip.

So we attempted to allay the flow of black smoke from under the bonnet. On stripping the expensively overhauled engine the cause was plain to see. Would you believe twenty piece piston rings? Luckily the bits had all stayed in their grooves and none had made their mark on the cylinder walls. The bores were in a reasonable state so with the engine in place we fitted new pistons and rings without bothering to re-bore the thing. Only a temporary measure, as a Ford engine was contemplated for the future. Valves in the head were ground in and all re-assembled. The head turned out to be nicely modified, although by whose hand we could not tell.

When the car was running again we paid a visit to **Bijo Ltd.** at **Rossway Farm, Little Bushey Lane, Bushey, Herts.**, breakers of sporting machinery wherein plenty of used tuning goodies lie on the dark shelves. We bought a 40 DCOE Weber with manifold and had it re-jetted and overhauled at **Chris Montague Carburettor Co.**, of **364 Cricklewood Lane, London NW2**, who charged us £11 for the job. This may sound a large sum to pay, but the carb was a trifle dirty in the first place and came



Britten and Kingsford-Booty at the drawing board behind unshaped Arkley rear end. Julian K-B has a beard but won't admit it.



Unshaped wings and door cappings need more file work, complete with face mask of course — a-a-aChoo . . .



Just after procuring the victim it looked like this — heavy and rolling about. Not at all like the taut behaviour with glass-fibre bodywork. 'Overhauled' engine started dropping oil.

back to us looking and performing as new.

It fitted the studs without trouble and with a final flourish we fitted the extra plastic fuel pipe.

Performance was there from small throttle tickle right the way down to the floor, more so at wider openings and it would gobble cubic feet of air with great enthusiasm. At any rate of knots it emitted that familiar rampipe rattle. This conversion — 40 DCOE and a stage 2/3 head is a very good one, giving more torque at the bottom end and plenty more at the top. Fuel consumption is in the region of 33 mpg.

The beauty of the body conversion is that it can all be done without taking the car off the road for more than a weekend at the most, if the front and rear ends are done separately. We collected the front end from Arkley Engineering early one Saturday evening. The glassfibre of this one-piece bonnet and wings is very strong and impressed us with its rigidity. It had to be pretty rigid because we took it home with one end tied to the back door of an estate car.

On the Sunday afternoon the glass-fibre front was prepared by having the indicators fitted and the headlamps screwed in place.

Late afternoon saw the first wing shaking to the tune of furious spanner work. All fairly straightforward — three nuts down each side of the radiator and two on the end of the chassis legs hold the front radiator cowl (ie, that piece of bodywork between the two wings). There are bolts all down the side of the cowl where it is joined to the wing. This takes care of the front.

Most of our bolts came undone without trouble, just a squirt of penetrating oil and a sharp tweak with clean sockets. Occasionally however, a sortie with the drill had to be made, followed by a swift execution with hammer and chisel. At the rear of each wing are three bolts which are undone from inside and a couple at the top — one attached to the rain duct and one screwing straight into the bulkhead.

The whole assembly was now loose and for the first time rather frightening — one doesn't like to see half the beloved machine flapping about in the breeze!

We heaved and produced a large amount of neighbour-stirring noise, but the wretched front would not come off. We discovered that the bumper attachments were still in place. These bolt to the two chassis legs which jut forward and it is on to these bolts that one attaches the hinges for the bonnet — so keep them when removed.

Later that afternoon, the Arkley front end graced the beaten-about hulk and we did in fact take the thing to work on the Monday — albeit without the lights wired up . . . shh!

One thing became painfully obvious when we stepped back to admire the result. The wheels looked very thin and unimportant under those enormous Arkley arches. So the search for some decent wheels began and ended quite quickly because we saw the ad for **Revolution** wheels. These wheels, it was thought, would look best on the car with their large spokes and solid construction. Anyway we think they are beootiful and should be on the car by next month



Until then we have the job of cleaning up the under bonnet area and the minor adjustments to the front end to make sure it stays on!

JC

ANCIENT SPRITE TO ARKLEY

PART TWO



LAST month you may remember we got at the front end of the car and it was just capable of being driven to Acton on the following Monday; clouds of glassfibre dust blowing over the pedestrians.

The job had taken far longer than we had thought (we tried to have it fitted properly in a Sunday afternoon). After a heavy lunch the various awkward nuts held up the removal of the frontal metal bits; it had to be a rather botched car which entered the Speed Sport car park that Monday morning.

The headlights weren't really fitted, just being screwed into place, with only a single rim from the usual securing assembly so that the men in blue would not pay too much attention. Needless to say, the car started for home well before dark — cos there was no wiring connected.

But the thing that needed the time, as with all glassfibre panels, was fitting. And by that we mean jiggling the thing around until all the edges and joints are as close as possible to where they should be. This is often quite a long process, depending on the car used.

The trouble with these panels is comparative accuracy. When the maker, be he Williams and Pritchard, Lenham, or anybody else, decides to make a panel, it is usual practice to take the average of all the production

tolerances used during the manufacture of the car, and to make a panel which has the most chance of fitting.

Once the size and shape of the mould is fixed, all panels made from that mould will be exactly the same as far as the basic dimensions are concerned. Because of the production tolerances at the factory main bits of different vehicles may arrive at the 'out' tray of the production line in slightly different sizes. Lenham report that they have similar trouble with glassfibre hardtops, and prefer to fit these items themselves to make sure that they *do* fit.

So . . . when one comes to fit a bonnet to a car which had every joint or panel made to a width of plus or minus so much you may find everything fits, and you may not. As it happened, the bonnet seemed to fall into place quite easily. With the four bolts up front to hold it, there was a slight bulge at the near-side rear edge and the side of the foot boxes stuck out too much. The first was cured by some re-adjustment of the front bolts, but it still sticks out on one side a little, and the second was cured by leaning on the now exposed foot boxes with a soft mallet.

The other way of effecting a cure is by sharing the 'excess' by padding the other side with rubber. This is a good idea anyway as it cuts rattling.

Lighting

To finish off the front till the next week, we fixed the headlamps in properly. The light unit holders on our car were smashed in the previous owner's accident. As this was the reason the car came to be in our hands at a sensible price, we weren't too unhappy about it. But in the course of buying new ones we discovered the two types of light unit which the Spridget uses. In fact, the Arkley bonnet will take the headlamps from any car, as long as the diameter is seven inches. If, for example, you decide that you do not like the sidelamp arrangement on the wings, you could fit the Mini seven inch units with a built in sidelamp bulb in the reflector.

However, we decided to go for the standard set-up, and met problems. There were two types of lamp available in the normal course of events, either a bulb-type or a sealed beam. The intention eventually was to use QH headlamps. Not being quite sure which QH units would come our way, we opted for a bulb type holder. This needs an adaptor to take the sealed beam light unit, if (as we did) you should wish to use it. Both the holder units were obtained at different times, and by the time the second one was obtained we had decided to use twin bulb QH units (Biodes) and opted for the strictly sealed beam only holder. This meant that we had a different type on both sides!

The advantage of the bulb type, with the Lucas adaptor, is its versatility. We had considered the use of the Lucas QH bulb unit conversion, using twin filament bulbs which slot into the fitting for the normal bulb, but settled for the French twin bulb units.

Some form of fixing was needed and until we were able to get hold of some straps a couple of rubber bungees were used, wrapped over the top of the bonnet. Having such a firm fixing at the front, we felt quite safe when it lifted up at forty mph — but passengers became a little terrified!

We then used some straps at the top of the bonnet one end being fixed just in front of the windscreen.

Spiked

The ultimate fixing is the type used by the competition car people — the nasty great spike which fits into a hole in the bonnet with a pin through the top. This is fitted at the top of the bonnet. Also of help, preventing rattling at high speed, is the thick black rubber thong.

But the most important is the nasty spike effort, as this is most likely to stop the back end of the bonnet coming through the windscreen in the event of a crash.

After the frantic activity of the weekend, in which the bonnet found its way on to the front of the car and wings, radiator grill and other hefty old bits found their way into the bushes behind the house; the lights, straps and other odds and ends were attached in the leisured hours of the following evenings. By the next weekend, all was ready for the assault on the tender end of the car.

There are two courses to be followed for the rear end treatment. It is not a simple unbolting job. You need a large hammer and chisel, plenty of muscle and determination and a good eye. If you insist on wearing a watch, check that it is a shock-proof one. The accompanying photographs should show where the cuts have to be made — but perhaps like us you prefer to have an expert do the job (not that it has to be done particularly precisely — none of the bits are going to show when the job is done).

Arkley Engineering will have one of their trained staff do the job in far less time, using a pneumatic chisel. This costs £5, and is probably going to cause the average builder far less headache if he does it this way.

Incidentally, should the prospect of glassfibreing the whole of the rear end of the car sound a little daunting, remember that Arkley Engineering will fix the rear end with glee. (*I thought they used glass fibre.* — Ed.) for £15. But fear not — after all we managed to do it.

We are not sure of the legality of our procedure, but we reckoned to drive away after the operation with the Arkley bit tied on with string! However, we dropped the car in one the Friday afternoon, deciding to cross our bridges when they were hatched.

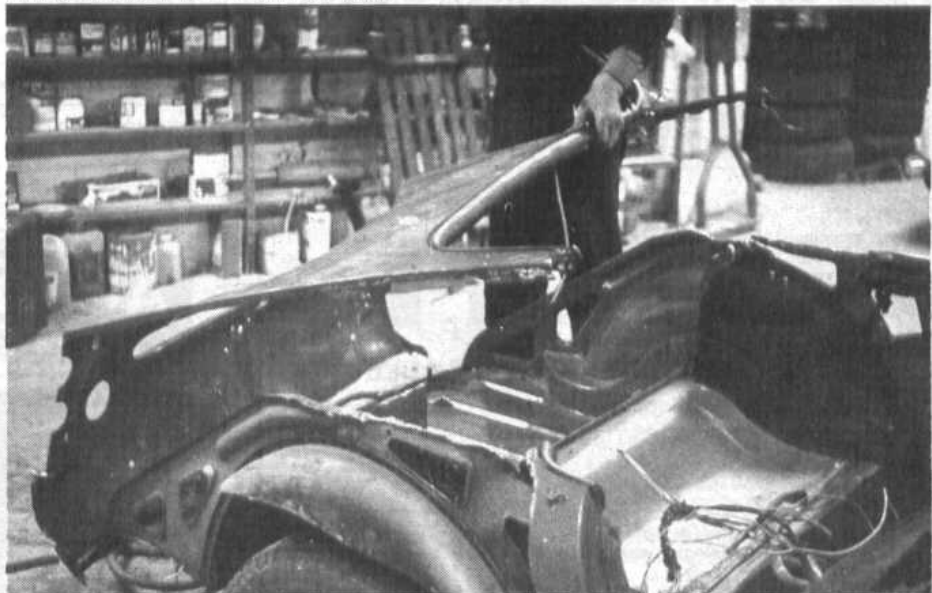
On the Saturday morning the pneumatic chisel started rattling the Arkley workshops to pieces. The first cut, as you should see from the photographs is made along the top of one of the wheel arches. The chisel then continues toward the front of the car, down the front of the arch. Cutting carries on downwards and stops at a point three to four inches above the top edge of the 'sill'. The chisel is then turned toward the door and stops about two inches short, so as to leave a decent amount on to which you will be bonding the glassfibre bit.

Keeping about two inches from the door, we cut upwards to the seam on the very top of the wing, then cut back along this seam. It is necessary to remove the lights from the back before starting this operation, and so the cut along the seam is continued back and down the rear wing of the car. With a nifty cut down the rearmost edge of the wheel arch, the whole wing panel is released, or should be, and is free to be pulled away.

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This is where we got to at the end of last month, wide wheelin' around the place on 7½ revolution wheels. Nice huh? Photos: Spencer Smith.



Attack the metal at the top of the support frames on both sides, so that the whole of the central panel can be lifted off... it is best to cut the metal at the back of the floor first.

We forgot some of the cutting at the back end... so we are doing it afterwards.



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The viciously vibrating chisel is then turned to that seam along the top of the wing again. This time it is the central part of the rear bodywork which is to be cut away. We cut along the join with the support frame, just under the top surface of the bodywork. This is important as that frame will be needed later for supporting the new bodywork.

When both sides have been treated in exactly the same way, the treatment is given to the rearmost end of the floor. Now comes the good bit. Giving the whole panel a good heave the ruddy lot should lift off.

Our man with the chisel hadn't cut enough along the back of the car, and had to finish the severance with the panel on the floor.

This just about completes the cutting chore. There are still some bits of wheel arch left which should be trimmed up to about three inches short of the top seam. The role of the metal left projecting is to add support to the glassfibre wings which will sit above the wheel later.

We cut some slots about two inches long across the remains of the arch, so that when the Arkley panel is fitted, the wheel arch, now made into a row of tabs, can be bent up to touch the wing. All clever stuff this.

We had the Arkley back end lying nearby, so we decided to see how it fitted. The floor seemed to project back too far, so about six inches had to be taken off the rear, but stopping short of the fuel tank!

We offered the panel to the car again and decided it was time to go and buy the glassfibre materials needed to do the sticking-on. First, we tied the thing on with string, had a stick-on number plate made up, and burnt ourselves on the exhaust pipe, which now hung out much too far behind the shortened back quarters.

We then went to the nearby "Automobile Plastics", who live at 7 Henry Road, East Barnet, Herts.

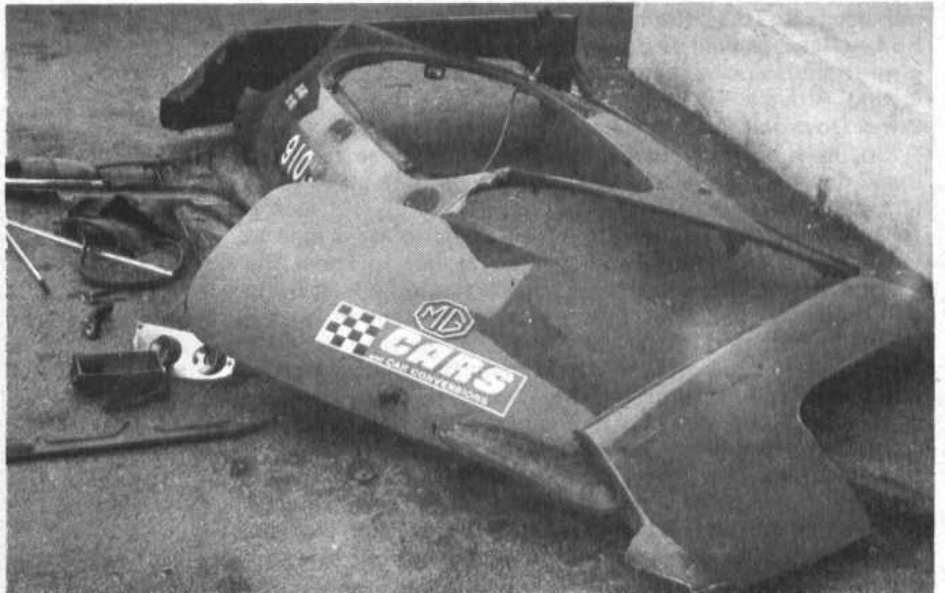
These chaps are very helpful indeed, and know exactly what you will need for any application, and can supply it all too. The fibre they recommend for Auto work of this kind is 1½ ounce matting made from chopped strands. This stuff is mixed with their own catalyst and accelerator, plus a resin dubbed IOI.

For this type of job, don't be tempted to buy one of the small repair kits, with minute quantities of everything — just buy the essentials, not that you will need an incredible quantity, but it is surprising how much you do use — especially if you are not used to it and find a gallon of the resin setting in 30 seconds! The way to use it at first is a little at a time.



When the arches have been cut back to leave only three inches of metal, cut slots in toward the centre.

All that hefty metal which used to make the car slow despite the Triple C sticker!



Before we could begin work with the 'glass', we had to make a 'key' on to which it would bond itself. This is done by drilling many little holes down the metal behind the doors and along the back of the floor — in fact, all the metal which will have glassfibre applied to it during the glueing on process. This takes quite a number of minutes and a large number of 1/8" inch drills, but is worth doing well as it affects the strength of the finished job. The next job was to thoroughly clean all the metal to be 'stuck'.

Next month we shall have space in which to tell of our experiences with glass fibre and a lot of useful tips learnt the hard way to use this stuff. With the back end roughly fitted in place we decided it was high time to fit those Revolution wheels. The new wheel arches are intended to cope

with about 7½J rims. The tyres we fitted are the absolutely fantastic Goodyear 'High Speeds', otherwise known as HR70 Rally Specials. Fitting these tyres to the wheels was easy enough, but the only firm able to balance them at 7.30 on a Saturday night (!) was Greyhound Tyres of Shepherd's Bush, to whom we are greatly indebted.

So for a while we sampled the real thrill of driving a car which felt like the engine was twice as big as it used to be, and which seems to be made for going round corners at double normal sane speed. However, this sort of driving is not for a car which has its back end rattling away on the temporary glassfibre joints which we had made, so next month we hope to have the thing finished off. Now how the hell do we get this resin off the typewriter? **JC**

ANCIENT SPRITE TO ARKLEY

PART 3



The Custard Cart tester needed a crash helmet for this speed. We just got very terrified! Photos: Graham Ferris.

THIS LOOKED LIKE BEING THE worst part of the whole thing. Even just attempting to stick the glass-fibre back-end on to the Spridge metal-work was not really being honest with ourselves. Oh, the worry of it all!

It wasn't that we had a habit of messing up this sort of job — it was just a matter of proportion. We hadn't tried a job of this size before, only having done the odd bit of glass-fibre filling on an even odder looking wing panel. So, it was on the cards that the resultant mess would be very embarrassing, and need a new word all to itself meaning 'super-mess.'

In fact it was easy. Honesty doesn't pay at all, it seems. All we did was this. With the glass-fibre matting (1½ oz chopped strand is best for this) and the resin mixed as per instructions, we cut a piece of matting big enough to cover the metal bodywork 'L' shape behind the door.

The 'L' shaped piece had been drilled or 'cheesecaked' with hundreds of holes to form a key for the glass-fibre. This was done with an electric drill and about ten 1/8 inch drills, each drill not lasting very long, because they weren't given enough time to cool it between the aggressive thrusts of the operator. They would start to smoke with the heat and eventually break off with a scream, which became all too familiar!

To finish the 'key' on the metal-work, we cleaned off as much of the paint as possible, with a wire brush in the drill, while willing helpers did some much more useful work with files. The files, rusty and crude as they were, gave much the best finish, as they 'roughed-up' the surface as well

as taking the paint off.

The preparation part is worth doing well, as it makes all the difference when the glass-fibre is mixed with the resin, and an inexperienced operator is trying to make it remain in place. If there is one part of such a grafting operation, which is real hair-tearing fun, it's seeing the last strip of glass-fibre slowly peeling off and onto the floor!

Still, one can't complain. We like working with glass and resin, because it does most of the work for you, once it's stuck properly in place (Yawn).

Now then, about that piece of glass-fibre matting we cut out to the shape of the door pillar. This is covered with the resin, so that it really goes transparent and the resin is dripping off it. This might sound messy, but loads of resin is needed as you'll see.

The resin must be correctly mixed, as per the instructions given with it. Most of the resins sold have different types of catalyst and accelerator doses, which have to be mixed into the resin in the right proportions. The catalyst may usually be mixed in several hours beforehand if need be, but the accelerator should only be added at the last minute. This is because, as its name would imply, the accelerator speeds up the setting of the resin, depending on both the surrounding temperature ('ambient' says the dictionary), and the amount added. All we can say by way of advice (for mixing resin), is mix the catalyst exactly as instructed, and follow the tables they will give you for the accelerator quantity. Too much and a whole jar of resin might become a

rapidly hardening jelly while you jab at it in anger. Particularly frustrating if you haven't any more.

Having covered the 'L' shaped bit of matting, we left it to soak up the resin while we painted resin both on the outside of the door pillar and the inside surface of the glass-fibre Arkley back end, where it was to make contact with the door pillar.

The shaped piece of matting was then applied to the pillar, and it stuck there. So far so . . . bad. The next bit was neither glorious nor satisfying, we regret to say. The back bit of the Arkley bodywork was then lifted up and placed over the back of the car. The bits behind the doors were pushed in so that they touched the bodywork and all would have been great, but we discovered that the 'G' clamps we'd bought were too small. You see, having fitted the glass-fibre over the metal edges with the layer of glass-fibre sandwiched in between, one has to clamp the thing together until the resin has set. As this takes about a day, we weren't too keen to hold it ourselves. So we cut a broad strip of hardboard



We bought this from the set of *Bonny and Clyde*. The car from this angle appears to be ready for the glass-fibre back-end.

roughly the size of the matting which formed the centre of the join. Well, we cut two actually — one for each side. The wood for these strips has to be slightly bendy of course. The strips are positioned on the sides of the car to press the glass-fibre onto the metal; they are fixed in position by means of G clamps. As you can't fit these to press on the rear part of the join, it is important to get hold of some deep clamps which have enough depth to reach over from the front of the glass-fibre bit, ie, the front of the door pillar.

If we'd thought of this, the operation would have been easy, but we didn't, and bought small clamps, which were only big enough to press firmly on the join at the front — not at the back. We only noticed this when we removed the clamps and hardboard: with a horribly soft crackling sound, the rear of the join detached itself from the metal and stuck out about an inch. 'What will Mr. Brit' (en say?' we wondered.

However, the front of the join was

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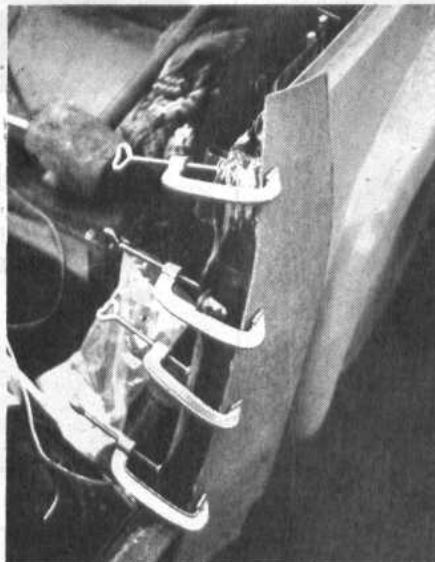
very strong, as it should have been all over, so all we had to do was hack out the hardened bits of the 'sandwich' layer of glass-fibre at the base of the Arkley bit. Then, managing to spread resin all over the garage floor and a little where it was supposed to go, we performed the operation again. This time, however, instead of using clamps, we drove the car up against a wall in the garage and used a jack with a broad base to press on the wood, and literally jacked the car away from the wall! This pressed the joint very hard indeed, so that the whole car moved across the floor about half an inch. But it worked.

The rear edge of the back end is bonded on next. This promised to be the simplest part, and we looked forward to at least one success. What caused fun and games on this one was lack of experience in handling the materials. Filling a wing panel is one thing, but trying to fill an inaccessible three-inch void was another. First, we tried doing it as though moulding a boat hull (with our springs that's what it felt like), which meant laying a suitably wide strip of matting over the gap at the back, and attempting to impregnate it there and then. The matting would stick to the brush and come out of place, or disappear 'down the void', followed by most of the resin, onto the floor. Next, we tried doing it the school-book way, with gauze 'formers' to give support to the mat. These kept moving out of the way.

Thoroughly exasperated, we grabbed a load of matting, covered it in too much resin, shoved it down the gap, and hoped no-one was looking! Having stopped the 3½ foot long gap, we were able to tidy it up with a proper looking sheet of resin-coated matting. The finish of this part isn't all that important, as it's usually a tool storage space with a lid fitted over it, a few inches behind the seats. The good point about our crude joining technique was that it had, in effect, several skins and was stronger than a join of two straight pieces of matting.

So strengthwise, we had finished the conversion. All that remained was a panel of glass-fibre down the inside of the door pillar, and filling the gap left in the inner wheel arches. Before we filled these gaps the wheels could be seen. So could the spray when it rained.

So that's it, at least for the back end. When Mr. Britten dreamed up the Arkley, he saw the vintage sports-car image for his car wasn't complete without cut away doors. So he pulled out his saw and invented a cutaway Spridget door. But, he knew that lots



Buy 'em, screw 'em and leave 'em — at least that's the theory when getting sticky with back-ends and things (Really!)



One refinement, which we intend to fit, is this bumper thing from Arkley Engineering.

of people don't like cold elbows: so for these people he left the doors as they are standard.

This leaves the builder with a choice. As we like the idea of cut doors, we took a pair of black capping pieces from Arkley, marked the shape on the doors and cut. The glass-fibre capping pieces fit over each newly shaped door and give that grained leather look most journalists have. (*Nooz to me — Ed.*)

Bare glass-fibre, leather-grained or not, is a little hard, so we used foam rubber and leathercloth to pad the elbow rest bit.

That spare wheel mounting on the sloping tail needs only a bolt through the bodywork and some sort of plate to hold the bolt in the hole at the centre of the wheel. If you have an alloy wheel, it is a good idea to fit a chain or one of the plastic covered wire ropes sold for protection of innocent bicycles, so that temptation is removed.

Lighting at the back end is up to you. We chose a simple light, as used for brake/tail light on many cars with sloping rear ends. Ours are rather angular, but the Mk 1 Sprite lights are used on several cars too, and are very attractive (kinky too).

Indicators can be anything. Again,

we visited the accessory shop and bought four plain, round lights with orange plastic domes. The Britten Arkleys are fitted with lights placed side by side, but we put ours one above the other. It makes no difference where they are fitted. (*Most useless statement of the year!*)

For our number plate we used the complete Mini Van assembly, which consists of a large black plate to which the number is fixed, and two light units on the ends which provide the fuzz-attracting light show. This was hung on the rear, with two hinges. These made very efficient brackets and served as a safety precaution in case the plate hit the ground — it wouldn't pull out of the bodywork.

Inside the cockpit, there is most of the original trim left: seats, dash, door trim, carpet. There is even the cardboard panel which fits over the space behind the seats in the standard Spridge. We painted the space inside the rear end and enlarged the cardboard panel to fit. Britten supplies a plastic strip which tastefully finishes the top edge of the rear cockpit. This is finished with some chrome ends. It all looks fairly smart as it is, but we have plans. Like bucket seats, a mahogany dash with thousands of instruments (like a cardiograph machine for the female passengers), full thick carpet and leather trim . . . stereo system . . . cocktail cupboard . . . zzzzz!

But ours still looks a little rough right now. We had the hood specially tailored (Oh yes! It DOES suit you Sir. It hides you completely . . .) by the Car Hood Company Ltd, 73 Southern Row, W.10. This costs £15 and takes a day to fit. Other items worth mention are the side-screens you wear with cut down doors, and a bumper for the front which Mr. Britten now sells.



Finally, before the curtain comes down on the Arkley Build, we must apologise on one score. As we are considerably modding the insides of our machine, we decided that 'finishing' the bodywork seams with filler etc was not going to help. So the pictures of a finished Arkley had to come from one of the demonstrators. This has meant that the nice Revolution wheels we've used plus various other bits, ain't been seen on a finished car. But fear not friends. All will be set to rights, in the near future. **JC**

COMPLETE SS TESTED



Photo: Spencer-Smith

THE ARKLEY SS and Triple C have been having an unashamed affair during the three days of this Summer. We have been seen in public, photographed, visited the in-places, and had a great time. Although we are now separated, we linger still over those fleeting days. But our separation is not eternal, it could never be!

The all too familiar Spridget with its hefty metal body and reasonable handling speed and fun value is at the heart of it all, but faint heart ne'er won critical journalist, and the one tested had the 1275cc engine which gives a decent amount of back-shoving. The car we are building has the 1098 unit in mild state of tune which is just as much fun, but the 948 engine is not really large enough to take advantage of the car (ooh you naughty man) as it no doubt would like to be.

The main thing about this car from the practical point of view and which will interest the speed merchants most, is the light weight. Benefit is bestowed most on the power to weight ratio of course; the car has an estimated weight of about 10 cwt, which, with a little mathematical skill, means half a ton. If this Spridget floorpan and bulkhead is fitted with a tuned engine of any kind giving around the 100 bhp mark, the subject in question becomes a very hot package indeed (not wanting to send E-type owners back to the dealers, but that is 200 bhp per ton you know, and if you build it yourself it isn't too costly either).

Another benefit of the light weight is that the brakes and suspension are able to do their job better with less weight to control. This takes care of any worries usually associated with heavily modified cars. You do not have for example, to fit larger brakes, nor do you have to move the brakes at all — and this goes for all the running gear. If the car has good brakes (discs preferably) and suspension in good order, all you have to do is swop metal bits for glassfibre bits on back, front and doors, and there we are, or were until we went for a drive.

You never know what lightness means until you drive one of these amazing little sports cars. The engine feels like it's tuned to the limit the way it's pulling away, but it's doing so from idling speed and very smoothly too, like somebody's stuffed a V8 under its snout. The next thing you

notice is an engine sound. Full stereo treatment, coming from both back and front, the exhaust pipe roaring away at the cars you have just passed, the carbs chatting to each other, making an excited giggle every time the engine is revved — changing gear is a positive pleasure because of this. The Sprite/Midget close ratio box is nice too and with much more response from the engine than before, it seems to love its work. Changing gear can be done really quickly, even on the new box tried. You can not only play tunes on the gearbox, the engine puts a descant in too. (Thank you, Beethoven — Ed).

Noise is never excessive however, and the car seems to forget about sound at higher speeds, saving its energy for the delightful purpose of going somewhere over the horizon very fast. And if the road over the hill and away has plenty of bends in it, so much the better. Perhaps the bendy lanes around the car's birthplace (Arkley), or the fact that John Britten has a very well sorted Midget with a great reputation around the Racing circuits in Modsports, or maybe it's just the great design of the Midget-Sprite combined with those fat juicy 7 in Goodyear High Speed tyres!

The test car was driven from a point near Northampton to London (54 miles) in fifty minutes and the legal limit was kept to but never exceeded — slowing down for corners in an Arkley becomes outdated, or so it seems.

One cannot comment on the interior because it is BL Spridget and bog standard. This is one advantage to the Arkley builder — he can leave all the instruments, seats and so on in place. But the standard seats on the 1970 car are not designed to hold the driver when driving Arkley as she should be: instead they encourage a very upright and dignified driving position or else the ridge at the back of the squab wins! All such items can of course be replaced when the car is ordered or built.

Steering is the quick rack and pinion of the Spridge and is even more precise because of the width of rubber on the road. It is very light too, which one would not expect when using wheels double the normal width. It is the ability to swing the car round in the most ridiculously narrow turns at about double the speed sanity dictates without roll or squeal (except from the passenger), and to have the power to squirt at will which makes this a great car to have in town as well as the open road. It is two inches shorter than the original car and this seems to make parking much easier. Again it is surprising how easy it is to turn the front wheels.

Traffic Wardens think the driver is mad and flee. We left the thing in the most embarrassing places and no pieces of paper appeared on the screen.

Unlike a large proportion of the 'fun'-and-glassfibre machinery we have tested recently, this one gave the stop watch little work to do. Using a very naughty amount of revs and a few puffs of Goodyear rubber we took the following figures:

MPH	SECS.
0-30 —	2.8
0-40 —	5.0
0-50 —	8.2
0-60 —	11.1
0-70 —	14.8

Top speed 90 mph. Fuel: 30 mpg overall.

The test car was fitted with the latest 3.9 ratio final drive which gave better cruising, but for out and out range go the older 4.22 may have been better.

Arkley SS models in all states of dress await their first loves eagerly at Arkley Engineering Ltd., Barnet Road, Arkley, Barnet, Herts. 1970 based cars can be bought for £950, 1275cc cars for 1967 parentage can be had for £750 and the prices range down to £495 for a 948 engined car, based on the early models. Or you can build one. Cost should be about £173 on top of the cost of a crunched car. **JC**